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(FILE 'HOME' ENTERED AT 11:34:24 ON 12 JUL 2002)

INDEX 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO,
CABA,
CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB,
DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 11:34:32 ON
12 JUL 2002
SEA (CARBOXYL-PEG) OR (BIOTIN-PEG) OR (PEG-SILANES) OR
(HETEROF

2 FILE ANABSTR
8 FILE BIOSIS
3 FILE BIOTECHNO
1 FILE CANCERLIT
25 FILE CAPLUS
3 FILE DDFU
4 FILE DGENE
3 FILE DRUGU
3 FILE EMBASE
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2 FILE IFIPAT
1 FILE JICST-EPLUS
7 FILE MEDLINE
10 FILE SCISEARCH
3 FILE TOXCENTER
44 FILE USPATFULL
6 FILE WPIDS
6 FILE WPINDEX

L1 QUE (CARBOXYL-PEG) OR (BIOTIN-PEG) OR (PEG-SILANES) OR
(HETEROF

FILE 'USPATFULL, CAPLUS, SCISEARCH' ENTERED AT 11:37:35 ON 12 JUL 2002
L2 79 S L1
L3 71 DUP REM L2 (8 DUPLICATES REMOVED)
L4 78078 S L3 AND (FUSION PROTEIN) OR (HYBRID PROTEIN) OR (CHIMER?)
L5 14 S L3 AND (FUSION PROTEIN OR HYBRID PROTEIN OR CHIMER?)

L3 ANSWER 68 OF 71 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:196581 CAPLUS
DOCUMENT NUMBER: 122:38832
TITLE: Pharmaceutical liposomes comprising PEG for
administration of polypeptides
INVENTOR(S): Zalipsky, Samuel; Martin, Francis
PATENT ASSIGNEE(S): Liposome Technology, Inc., USA
SOURCE: PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9421281	A1	19940929	WO 1994-US3102	19940322
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9463683	A1	19941011	AU 1994-63683	19940322
PRIORITY APPLN. INFO.:			US 1993-35640	19930323
			WO 1994-US3102	19940322
AB	Pharmaceutical liposomes comprising PEG are prep'd. for administration of polypeptides. Liposomes contg. biotin-PEG were incubated in the presence of avidin. Avidin-coated liposomes were incubated with biotinylated IgG to obtain liposome-bound antibody.			

L3 ANSWER 59 OF 71 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:164107 CAPLUS
TITLE: Incorporation of PEG-proteins into polymers.
AUTHOR(S): LeJeune, K. E.; Panza, J.; Russell, A. J.
CORPORATE SOURCE: Dept. Chemical Engineering, Carnegie Mellon
University, Pittsburgh, PA, 15219, USA
SOURCE: Book of Abstracts, 213th ACS National Meeting, San
Francisco, April 13-17 (1997), POLY-182. American
Chemical Society: Washington, D. C.
CODEN: 64AOAA
DOCUMENT TYPE: Conference; Meeting Abstract
LANGUAGE: English
AB While the attachment of proteins to polymers is straightforward, their incorporation during polymer synthesis holds several advantages. Unfortunately, the vast majority of polymers occur in harsh org. solvents which have little to no ability to solubilize protein. The attachment of polyethylene glycol to a protein mol. can greatly enhance org. solvent solv. and facilitates protein polymer synthesis. Since a PEG-protein can be dissolved in an org. solvent in close proximity to its native structure and contains functionalities capable of reacting with a growing polymer chain, the enzyme could become intrinsically coupled to a polymeric material during polymer synthesis. In order to react PEGylated proteins with monomers in org. soln. without significant deleterious effects, a **heterofunctional PEG** must be employed with one end of the PEG designed to couple to a protein and the other with a growing polymer chain. We have synthesized subtilisin polymers through using various **heterofunctional PEG** acrylates. Resultant PEG-subtilisin macromonomers and biopolymers have significant activity retention in both aq. and org. media. Significant enzyme stabilization upon PEG modification and immobilization have also been obstd.

L3 ANSWER 56 OF 71 USPATFULL
ACCESSION NUMBER: 97:89038 USPATFULL
TITLE: Poly(ethylene glycol) and related polymers
monosubstituted with propionic or butanoic acids and
functional derivatives thereof for biotechnical
applications
INVENTOR(S): Harris, J. Milton, Huntsville, AL, United States
Kozlowski, Antoni, Huntsville, AL, United States
PATENT ASSIGNEE(S): Shearwater Polymers, Inc., Huntsville, AL, United
States (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION:
US 5672662 19970930
APPLICATION INFO.: US 1995-642231 19951002 (8)
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-499321, filed
on 7 Jul 1995, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Krass, Frederick
LEGAL REPRESENTATIVE: Bell, Seltzer, Park & Gibson, P.A.
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
LINE COUNT: 1103

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Active esters of PEG acids and related polymers are provided that have
a

single propionic or butanoic acid moiety and no other ester linkages.
These polymer acids have a half life in water of from about 10 to 25
minutes. For example, alpha-methoxy, omega-propionic acid succinimidyl
ester of PEG ("methoxy-PEG-SPA") has a nearly ideal reactivity with
amino groups on proteins and other biologically active substances. The
half life of methoxy-PEG-SPA is about 16.5 minutes in water. The
invention also provides conjugates with proteins, enzymes,
polypeptides,

drugs, dyes, nucleosides, oligonucleotides, lipids, phospholipids,
liposomes, and surfaces of solid materials that are compatible with

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INDEX 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO,
CABA,
CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB,
DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 11:04:31 ON
12 JUL 2002

SEA (FUSION PROTEIN) OR (HYBRID PROTEIN) OR (CHIMER?)

1104 FILE ADISALERTS
212 FILE ADISINSIGHT
108 FILE ADISNEWS
3601 FILE AGRICOLA
116 FILE ANABSTR
543 FILE AQUASCI
1264 FILE BIOBUSINESS
591 FILE BIOCOMMERCE
49392 FILE BIOSIS
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12935 FILE BIOTECHDS
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4830 FILE CABA
23044 FILE CANCERLIT
54414 FILE CAPLUS
1847 FILE CEABA-VTB
53 FILE CEN
667 FILE CIN
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10 FILE CROPB
183 FILE CROPU
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2346 FILE DDFU
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3087 FILE DRUGU
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39825 FILE EMBASE
22984 FILE ESBIOBASE
3391 FILE FEDRIP
127 FILE FROSTI
580 FILE FSTA
19443 FILE GENBANK
19 FILE HEALSAFE
4509 FILE IFIPAT
3619 FILE JICST-EPLUS
11 FILE KOSMET
23090 FILE LIFESCI
13 FILE MEDICONF
72637 FILE MEDLINE
27 FILE NIOSHTIC
422 FILE NTIS
74 FILE OCEAN
6153 FILE PASCAL
111 FILE PHAR

5 FILE PHIC
419 FILE PHIN
3054 FILE PROMT
41834 FILE SCISEARCH
1 FILE SYNTHLINE
28192 FILE TOXCENTER
22753 FILE USPATFULL
118 FILE USPAT2
7478 FILE WPIDS
7478 FILE WPINDEX
L1 QUE (FUSION PROTEIN) OR (HYBRID PROTEIN) OR (CHIMER?)

FILE 'BIOSIS, CAPLUS, MEDLINE, EMBASE, SCISEARCH, BIOTECHNO, TOXCENTER, LIFESCI' ENTERED AT 11:08:46 ON 12 JUL 2002
L2 633 S L1 AND LINK? (W) REGION
L3 8 S L2 AND (POLYETHYLENE (W) GLYCOL) OR PEG-NPC OR (X-PEG-Y)
L4 5 DUP REM L3 (3 DUPLICATES REMOVED)
L5 83 S L1 AND (LINK? (W) AGENT)
L6 138958 S L5 AND (PEG) OR (POLYETHYLENE GLYCOL)
L7 0 S L5 AND PEG
L8 42 DUP REM L5 (41 DUPLICATES REMOVED)
L9 0 S L5 AND (POLYETHYLENE (W) GLYCOL)
L10 16042 S (CROSS (W) LINKING (W) REAGENT)
L11 67326 S L10 AND (POLYETHYLENE (W) GLYCOL) OR (PEG)
L12 225 S L10 AND (POLYETHYLENE (W) GLYCOL)
L13 75 S L10 AND (PEG)
L14 58 DUP REM L13 (17 DUPLICATES REMOVED)

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L8 ANSWER 39 OF 42 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 13
ACCESSION NUMBER: 1989:587013 CAPLUS
DOCUMENT NUMBER: 111:187013
TITLE: **Chimeric** protein: abrin B chain-trypsin inhibitor conjugate as a new antitumor agent
AUTHOR(S): Lin, Jung Yaw; Hsieh, Yih Shou; Chu, Shu Chen
CORPORATE SOURCE: Coll. Med., Natl. Taiwan Univ., Taipei, 10018, Taiwan
SOURCE: Biochem. Int. (1989), 19(2), 313-23
CODEN: BIINDF; ISSN: 0158-5231
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Abrin B chain (ANB) and trypsin inhibitor isolated from *Acacia confusa* (ACTI) were covalently linked to form a **chimeric** protein (ANB-ACTI), using N-succinimidyl-3-(2-pyridyldithio)propionate as **linking agent**. The **chimeric** protein had 31% of the trypsin-inhibitory activity of ACTI and 7% of the hemagglutinating activity of ANB but caused no inhibition of protein biosynthesis. ANB-ACTI had strong inhibitory effects on the growth of sarcoma 180 cells and Hela cells in culture, while the mixt. of an equiv. amt. of free ANB and ACTI did not. Thus, the ANB of the **chimeric** protein may act as a vector to carry ACTI into the tumor cells. The incorporation of ACTI into the **chimeric** protein potentiates its antitumor activity as